

- Nasal entire; ventrals 191; subcaudals 44 6. *A. Bocagii*, Blgr. *
 (Angola.)
- Nasal entire; ventrals 138-166; subcaudals
 37-53 7. *A. capensis*, Smith †.
 (E. & S.E. Africa.)
2. Second and third upper labials entering
 the eye.
- Ventrals 110-149; subcaudals 21-40 8. *A. nigriceps*, Ptrs.
 (Mozambique, Nyassaland.)
- Ventrals 161; subcaudals 41 9. *A. punctatolineatus*,
 Blgr. ‡ (Angola.)
- II. A single præfrontal.
- Frontal as long as its distance from the end of
 the snout 10. *A. lineatus*, Ptrs.
 (Guinea.)
- Frontal longer than its distance from the end of
 the snout 11. *A. anomalus*, Blgr.
 (Gold Coast.)

The types of the new snakes described above are in the British Museum, and formed part of a small collection on which Dr. F. Werner has recently reported (Verh. zool.-bot. Ges. Wien, xiv. 1895, p. 190). I take this opportunity to observe that the lizard described as *Gymnodactylus africanus*, Werner, is a *Gonatodes*, closely allied to the Indian *G. ornatus*. It should stand as *Gonatodes africanus*.

XXVII.—*The Subfamilies, Genera, and Species of the Copepod Family Ascomyzontidæ, Thorell: Diagnosis, Synonymy, and Distribution.* By Dr. WILH. GIESBRECHT, Naples.

Tribus AMPHARTHANDRIA, Giesbr. 1892.

Both anterior antennæ of male transformed into clasping-organs, adapted for copulation.

Family Ascomyzontidæ, Thorell, 1859.

Lips forming a siphon, produced or not into a shorter or longer suctorial tube. Mandible stilet-shaped, enclosed in the siphon. Head coalescent with first thoracic segment. Abdo-

* *Uriechis capensis*, part., Bocage.
 † *Cercocalamus collaris*, Günther.
 ‡ *Uriechis capensis*, part., Bocage.

men of ♀ 3- or 4-, of ♂* 4- or 5-jointed; genital aperture lateral; furca with 6 setæ. Anterior antennæ of ♀ 8- to 21-jointed, with a single æsthetask (sensorial appendage); clasp-antennæ of ♂ 10- to 17-jointed, with one or several æsthetasks. Posterior antennæ prehensile, 4- or (rarely) 3-jointed; exopodite 1-jointed. Mandible-palp 1-branched (1- or 2-jointed) or wanting. Maxilla 2- or (rarely) 1-lobed. Anterior and posterior foot-jaws strong prehensile organs. First four pairs of feet swimming-organs; their exo- and endopodites in general 3-jointed (sometimes both branches of first pair 2-jointed, inner branch of fourth pair 2-jointed or wanting). Fifth pair of feet rudimentary, 2 jointed (first joint often coalescent with fifth thoracic segment), or (rarely) setiform. Sexes differ in size and form of body, in segmentation of abdomen (♂ having one segment more than ♀), and in form, segmentation, appendages, and function of anterior antennæ.

Subfamily 1. ASCOMYZONTINÆ, nov.

Anterior antennæ of ♀ 11- to 21-jointed; the æsthetask-bearing joint followed by 2 or 3 apical joints; elasp-antennæ of ♂ 17- (*Cyclopicera*, *Asterocheres*), or 16- (*Acontiophorus ornatus*), or 13- (*Dermatomyzon*) jointed, rarely (*Acontiophorus*) with additional æsthetasks. Mandible with palp. Maxilla consisting of a short basal joint and two lobes, each bearing 3-5 setæ. Last joint of outer branch of third and fourth feet with 3 or 4 setæ at inner margin. Thoracic segments laterally rounded off, rarely produced into lateral processes. Abdomen of ♀ 3- or 4-, of ♂ 4- or 5-jointed. Siphon usually without, sometimes with, suctorial tube. Inner branch of fourth foot normal, similar to the inner branches of preceding feet. Terminal joint of fifth foot oval or elongated.

Genus 1. CYCLOPICERA, Brady, 1872 †.

Thoracic segments laterally rounded off. Rostrum flat. Abdomen of ♀ 3-, of ♂ 4-jointed. Anterior antennæ of ♀ 21-, of ♂ 17-jointed; with one æsthetask in both sexes.

* Males are known of *Cyclopicera echinicola*, *violaceum*, *minutum*, *Dermatomyzon elegans*, *Asterocheres Lilljeborgii*, *Clausomyzon gracilicauda*, *Acontiophorus ornatus*, *Dyspontius* sp. I have also examined males of *Cyclopicera echinicola*, *Bradypontius chelifera*, *Pteropontius cristatus*, *Gallopontius fringilla*, *Dyspontius Thorellii*, *capitalis*, and *brevifurcatus*.

† According to Canu the genus *Isopodius*, Kriczagin (Mitth. nat. Ver. Kiew, vol. iii. p. 398, t. xiv.), is probably a synonym of *Cyclopicera*. I have not seen Kriczagin's work, which is written in Russian.

Exopodite of posterior antennæ shorter than penultimate joint. Siphon without tube. Mandible-palp 1-jointed, rod-shaped; setæ not plumose. Setæ of maxilla plumose or not. Swimming-feet: last joint of outer branch with 4, 4, 4, 4 plumose setæ, of inner branch with 6, 6, 6, 5 setæ; marginal spines of outer branches small. Terminal joint of fifth foot with 3 setæ.

1. *Cyclopicera echinicola*, Norman.

Ascomyzon echinicola, Norman, Rep. Brit. Assoc. for 1868, p. 300.

Cyclopicera latum, Brady, Ann. & Mag. Nat. Hist. ser. 4, vol. x. p. 8, t. iii., and Mon. iii. p. 56, tt. lxxxix., xc.; I. C. Thompson, Proc. Lit. & Phil. Soc. Liverpool, vol. ii. p. 189, and Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 36; Th. Scott, Eleventh Rep. Fish. Board Scotland, p. 210, t. iii., and ? Trans. Linn. Soc., 2nd ser. Zool. vol. vi. p. 127, t. xiii. figs. 25-30.

Length of ♀ 0.8-0.85, of ♂ 0.55-0.6 millim. Nearly colourless. The last two abdominal segments of ♀ equal in length, rather longer than the furca. Twelfth to eighteenth joints of anterior antennæ of ♀ longer than broad; the last three joints narrower than the preceding. Outer lobe of maxilla scarcely half as long and broad as the inner; setæ not plumose.

Distr. British Seas; Naples.

2. *Cyclopicera violaceum*, Claus.

Echinocheres violaceus, Claus, Arb. Wien, vol. viii. p. 356, t. v.

Length of ♀ 1.15, of ♂ 0.75 millim. Violaceous, black-pigmented, similar to the host (*Strongylocentrotus lividus*). Last abdominal segment of ♀ as long as the furca and shorter than the preceding. Seventeenth and eighteenth joints of the anterior antennæ of ♀ longer than broad; the preceding four joints as long as broad; the last three joints much narrower. Outer lobe of maxilla narrower (and shorter?) than the inner, which has a long plumose seta and three short setæ.

Distr. Triest; Naples?

3. *Cyclopicera minutum*, Claus.

Echinocheres minutus, Claus, *ibid.* p. 356, tt. v., vi.

Length of ♀ 0.5, of ♂ 0.4 millim. Brownish, black-spotted. The last two abdominal segments and the furca nearly equal in length. No joint of anterior antennæ of ♀ longer than broad (if any, the eighteenth), most of them much

broader than long; the last three joints scarcely narrower than the preceding. Maxilla as in *violaceum*.

Distr. Triest.

Genus 2. ASTEROCHERES, Boeck, 1859.

Thoracic segments laterally rounded off. Rostrum narrow, not prominent. Abdomen of ♀ 3-, of ♂ (probably) 4-jointed. Anterior antennæ of ♀ 19-, of ♂ 17-jointed; with one aesthetask in both sexes. Exopodite of posterior antennæ shorter than penultimate joint. Siphon without tube. Mandible-palp 2-jointed, rod-like. Setæ of maxilla not or scarcely plumose. Terminal joint of fifth foot with two setæ.

4. *Asterocheres Lilljeborgii*, Boeck.

Asterocheres Lilljeborgii, Boeck, Forh. Vid.-Selsk. Christiania, 1859, p. 6, t. ii.; ? Canu, Cop. Boulonnais, p. 264, t. xxvii.

Artotrogus Lilljeborgii, Brady, Mon. iii. p. 64.

Length of ♀ 1, of ♂ (?) 0.6 millim. Mandible-palp long; first joint twice as long as second. Terminal joint of fifth foot large, margins ciliated. Cephalothorax of ♀ circular; genital segment longer than broad.

Distr. Norway; Ireland; English Channel?

5. *Asterocheres Renaudi*, Canu.

Asterocheres Renaudi, Canu, Cop. Boulonnais, p. 263, t. xxvi.

Length of ♀ 0.85 millim. Mandible-palp short; the two joints rather equal in length. Chitine of siphon and appendages of head transversely rippled. Fifth foot small. Cephalothorax elongated; genital segment of ♀ broader than long.

Distr. English Channel.

Genus 3. DERMATOMYZON, Claus, 1839.

Thoracic segments laterally rounded off. Rostrum blunt. Abdomen of ♀ 4-, of ♂ 5-jointed. Anterior antennæ of ♀ 19-, of ♂ 13-jointed; with one aesthetask in both sexes. Exopodite of posterior antennæ shorter than the penultimate joint. Siphon without tube. Mandible pointed, scarcely denticulated; palp 1-jointed, rod-like; setæ not plumose. Setæ of maxilla not plumose. Swimming-feet: last joint of outer branch with 5, 5, 4, 4 plumose setæ, of inner branch with 6, 6, 5, 4 setæ. Terminal joint of fifth foot with five setæ.

6. *Dermatomyzon nigripes*, Brady and Robertson.

Cyclopicera nigripes, Brady, Mon. iii. p. 54, t. lxxxix.; Th. Scott, Tenth Rep. Fish. Board Scotland, p. 267; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 36.

? *Ascomyzon Thorelli*, Sars, Arch. Math. Nat. vol. iv. p. 474.

? *Cyclopicera nigripes*, Sars, Norske Nordh. Exp., Crust. ii. p. 79

Length of ♀ 1·2–1·25 millim. Swimming-feet smoky black. First joint of anterior antennæ with a long sharp spine.

Distr. British seas; Spitsbergen?

7. *Dermatomyzon elegans*, Claus*.

Dermatomyzon elegans, Claus, Arb. Wien, vol. viii. p. 351, t. vi.; Canu, Cop. Boulonnais, p. 260, t. xxvi.

Length of ♀ 1–1·35, of ♂ 0·9–1 millim. Feet colourless. First joint of anterior antennæ with seta.

Distr. Trieste; English Channel; Naples.

Genus 4. CLAUSOMYZON, gen. nov.

Thoracic segments laterally rounded off. Abdomen of ♀ 4-, of ♂ 5-jointed. Anterior antennæ of ♀ 20-, of ♂ 2-jointed. Exopodite of posterior antennæ shorter than penultimate joint. Siphon without tube. Mandible denticulated at the oblique apex; palp reduced to a rather short plumose seta. Setæ of maxilla (probably) not plumose. Terminal joint of fifth foot curved, elongated, bluntly serrated at the apex.

8. *Clausomyzon gracilicauda*, Brady.

Cyclopicera gracilicauda, Brady, Mon. iii. p. 58. t. lxxxiii.; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 36; Th. Scott, Tenth Rep. Fish. Board Scotland, p. 262.

Ascomyzon comatula, Rosoll, Sitzungsab. Akad. Wien, vol. xvii. p. 189, t. i.

Distr. British seas; Trieste.

Genus 5. RHYNCHOMYZON, gen. nov.

♀. Thoracic segments produced laterally into processes, which are directed backwards and conspicuous in dorsal

* *Dermatomyzon gibberum*, Th. & A. Scott (Ann. & Mag. Nat. Hist. ser. 6, vol. xiii. p. 144, t. ix.) and Th. Scott (Twelfth Rep. Fish. Board Scotland, p. 260, t. x.), from the Firth of Forth, having only three abdominal segments, should be excluded from the genus *Dermatomyzon*; the species agrees in this respect with *Cyclopicera* and *Asterocheres*.

view. Rostrum very prominent, beak-shaped. Abdomen 4-jointed. Anterior antennæ 13- to 16-jointed. Exopodite of posterior antennæ shorter than penultimate joint. Siphon without tube. Mandible large, denticulated at the oblique apex; palp rod-like, with scarcely plumose seta. Setæ of maxilla not plumose. Swimming-feet: last joint of outer branch with 5, 4, 4, 4 plumose setæ, of inner branch with 6, 6, 5, 4 setæ. Terminal joint of fifth foot with three setæ. ♂ unknown.

9. *Rhynchomyzon falco*, sp. n.

♀. Length 1.45–1.5 millim. Head triangular in dorsal view. Processes of thoracic segments largely produced; anterior abdominal segments with similar processes. Furca as long as the last abdominal segment; length: breadth = 3:2. Anterior antennæ 13- or 14-jointed; first joint with spine, last joint granulate.

Distr. Naples.

10. *Rhynchomyzon purpurocinctum*, Th. Scott.

Cyclopicera purpurocinctum, Th. Scott, Eleventh Rep. Fish. Board Scotland, p. 209, t. iii.

♀. Length 0.85–1 millim. Head elliptical in dorsal view; processes of thoracic segments much less produced than in *falco*, of abdominal segments nearly wanting. Furca longer than the last two abdominal segments combined, five times as long as broad. Anterior antennæ 16-jointed; first joint without spine, last joint not granulate.

Distr. Firth of Forth, Mull; Naples.

Genus 6. ASCOMYZON, Thorell, 1859.

♀. Thoracic segments laterally rounded off. Rostrum not prominent. Abdomen 3-jointed. Anterior antennæ 20- (21-?) jointed. Exopodite of posterior antennæ shorter than penultimate joint. Siphon with tube. Mandible-palp rod-like, long, 2-jointed; setæ not plumose. Maxilla large; the two lobes unequal; setæ not plumose. Setæ of swimming-feet probably as in *Cyclopicera*. Terminal joint of fifth foot with two (three?) setæ.

11. *Ascomyzon Lilljeborgii*, Thorell*.

Ascomyzon Lilljeborgii, Thorell, K. Svensk. Vet.-Akad. Handl. Stockholm, vol. iii. p. 78, t. xiv.; ? Aurivillius, Öfv. K. Vet.-Akad. Förh. Stockholm, 1882, p. 105, t. xvi.

* Another species of the genus, *Ascomyzon calvum*, Brady and Robertson (Rep. Forty-fifth Meet. Brit. Assoc. 1876, p. 197), appears to have never been described.

? *Artotrogus Boeckii*, Brady, Mon. iii. p. 61, t. xci.; ? Bourne, Journ. Mar. Biol. Assoc. ser. 2, vol. i. p. 317; ? Th. Scott, Eleventh Rep. Fish. Board Scotland, p. 210; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 37.

Non *Artotrogus Boeckii*, G. M. Thomson, Trans. N. Zeal. Inst. vol. xv. p. 112, t. ix.

Distr. Bohuslän; British seas?

Genus 7. ACONTIOPHORUS, Brady, 1880.

Thoracic segments laterally rounded off. Rostrum flat. Abdomen of ♀ 3-, of ♂ 4-jointed. Anterior antennæ of ♀ 11- to 16-jointed; number of æsthetascs on the antennæ of ♂ augmented. Exopodite of posterior antennæ longer than penultimate joint. Siphon with long tube. Mandible-palp small, with large plumose seta. Setæ of maxilla plumose. Swimming-feet: last joint of outer branch with 5, 4, 3, 3 plumose setæ, of inner branch with 6, 6, 5, 4 setæ. Terminal joint of fifth foot with five setæ.

12. *Acontiophorus scutatus*, Brady and Robertson.

Solenostoma scutatum, Brady and Robertson, Ann. & Mag. Nat. Hist. ser. 4, vol. xii. p. 141.

Acontiophorus scutatus, Brady, Mon. iii. p. 69, t. xc.; ? G. M. Thomson, Trans. N. Z. Inst. vol. xv. p. 113, t. viii.; Claus, Arb. Wien, vol. viii. p. 359, t. vii.; Canu, Cop. Boulonnais, p. 270, t. xxix.; I. C. Thompson, Proc. Lit. & Phil. Soc. Liverpool, vol. ii. p. 69, and Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 37.

? *Acontiophorus angulatus*, I. C. Thompson, Journ. Linn. Soc., Zool. vol. xx. p. 153, tt. xii., xiii.

♀. Length 0·9–1 millim. Cephalothorax elongated. Posterior margin of abdominal segments not angulated. Furca nearly three times as long as broad. Anterior antennæ 11-jointed. Tube of siphon reaches to near end of body.

♂ unknown.

Distr. British seas; New Zealand; Trieste; Madeira?; Naples.

13. *Acontiophorus ornatus*, Brady and Robertson*.

Ascomyzon ornatum, Brady and Robertson, Rep. Forty-fifth Meet. Brit. Assoc. 1876, p. 197.

Acontiophorus armatus, Brady, Mon. iii. p. 71, t. lxxxii.; Claus, Arb. Wien, vol. viii. p. 359, t. vii.

Length of ♀ 1·5, of ♂ 1 millim. Cephalothorax large.

* *Acontiophorus elongatus*, Th. & A. Scott (Ann. & Mag. Nat. Hist. ser. 6, vol. xiii. p. 145, t. ix.) and Th. Scott (Twelfth Rep. Fish. Board Scotland, p. 261), from the Firth of Forth, should be excluded from

Anterior segments of abdomen laterally angulated. Furca scarcely longer than broad. Anterior antennæ in both sexes 16-jointed. Tube of siphon reaches to near end of thorax.

Distr. Yorkshire; Triest; Naples.

Subfamily 2. *DYSPONTIINÆ*, nov.

Anterior antennæ of ♀ 8-12-jointed; æsthetask on the last joint; claspings-antennæ of ♂ 10- or 11-jointed, with thirteen additional æsthetasks. Mandible without palp, consisting only of the stilet. The two lobes of maxilla stiff, each bearing one or two, rarely (*Parartrogus*) three and five setæ. Last joint of outer branch of third and fourth feet with five setæ on the inner margin. Abdomen of ♀ 4-, of ♂ 5-jointed; thoracic segments rarely rounded off laterally; usually produced into lateral processes, conspicuous in dorsal view. Siphon with suctorial tube (except *Parartrogus*). Inner branch of fourth foot either as in preceding feet, or 3-jointed, with rudimentary setæ, or 2-jointed, or wanting. Terminal joint of fifth foot small, oblong or knob-like.

Genus 8. *PARARTROGUS*, Th. & A. Scott, 1893.

♀. Thoracic segments laterally rounded off. Anterior part of genital segment scarcely broader than posterior. Anterior antennæ 9-jointed. Posterior antennæ 4-jointed. Siphon "rudimentary" (without tube?). Lobes of maxilla short, one with three spines and two setæ, the other (much smaller) with two setæ. Both branches of first foot and inner branch of fourth foot 2-jointed, latter with plumose setæ. Terminal joint of fifth foot oblong.

14. *Parartrogus Richardi*, Th. & A. Scott.

Parartrogus Richardi, Th. & A. Scott, Ann. & Mag. Nat. Hist. ser. 6, vol. xi. p. 210, t. vii.; Th. Scott, Eleventh Rep. Fish. Board Scotland, p. 210, t. iv.

Distr. Firth of Forth.

this genus, because (1) the authors describe the exopodite of the posterior antenna as "very small"; (2) they find the anterior antennæ 17-jointed (although the æsthetask-bearing joint is followed by only one joint), and only three setæ on the terminal joint of the fifth foot; (3) they do not mention the large plumose seta of the mandible-palp. I cannot identify the genus to which the species belongs, in the absence of any notice of the mandible-palp. Another species, described by G. M. Thomson (Trans. N. Zeal. Inst. vol. xv. p. 112, t. xi.) as *Artotrogus ovatus*, seems to be related to *Acontiphorus*, the exopodite of posterior antennæ having the same proportional length; but the species differs from this genus in the absence of a suctorial tube and in the number (8 or 9) of joints in the anterior antennæ.

Genus 9. ARTOTROGUS, Boeck, 1859.

Important characters of the genus being problematic or entirely wanting in Boeck's paper, it is impossible at present to draw up a diagnosis of *Artotrogus*; therefore I give here a critical abstract of the author's description of the typical species.

15. *Artotrogus orbicularis*, Boeck.

Artotrogus orbicularis, Boeck, Forh. Vid.-Selsk. Christiania, 1859, p. 2, t. i.; Hansen, Dijnphna, 1886, p. 78; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 37; non Brady and Robertson, Rep. Forty-fifth Meet. Brit. Assoc. 1876, p. 197.

Body circular. Thoracic segments perhaps with lateral processes. Segmentation of abdomen doubtful (Boeck's figure shows three short and one long segment—impossible in a mature female). Furca broader than long. Anterior antennæ 9-jointed. Posterior antennæ 3- (?) jointed. Tube of siphon reaches to the middle of the interval between foot-jaws and first foot. Inner lobe of maxilla (considered by Boeck as mandible-palp) 2-jointed (?), with two setæ, outer lobe with one seta. Swimming-feet with 3-jointed branches. (Boeck says five pairs of feet, *i. e.* two pairs of foot-jaws, named by him first and second pair of feet, and three pairs of swimming-feet; so the figured "pes unus quarti paris" is really a foot of the second pair. Consequently Boeck has overlooked one pair of swimming-feet; and since this pair may be the fourth, as well as the third or second, it remains doubtful whether the fourth pair has a normal or rudimentary inner branch. The structure of the fourth foot remains doubtful, too, if we admit* that the specimen described by Boeck was immature, and had really only three pairs of feet; this being the case, the appendage which Boeck calls the rudimentary foot would be the not yet developed fourth pair.) An accurate redescription of this oldest species of Ascomyzontidæ is required, perhaps not for recognizing the species, but for determining the systematic position of the genus. If the inner branch of the fourth foot is found to be 3-jointed and its setæ rudimentary, the genus *Bradypontius* should perhaps be withdrawn.

Another genus, probably belonging to the subfamily Dyspontiniæ, but quite insufficiently characterized, is

* This conjecture accords with the above-mentioned segmentation of the abdomen; but the length of body (2 millim.) found by Boeck is greater than the length of the ova-bearing specimen dredged by I. C. Thompson (1.65 millim.).

CONOSTOMA, G. M. Thomson.

Species: *ellipticum* (cf. Trans. N. Z. Inst. vol. xv. p. 3, t. v.).

“Abdomen greatly abbreviated, only two segments being apparent . . . anterior antennæ about 9-jointed; posterior 4-jointed, secondary branch wanting . . . feet of the first pair with both branches only 2-jointed; next three pair almost similar.” Mandible and maxilla are not mentioned.

Genus 10. MYZOPONTIUS, gen. nov.

♀. Thoracic segments scarcely produced into lateral processes, neither are the abdominal. Rostrum flat. Anterior part of genital segment scarcely broader than posterior. Anterior antennæ 9- to 12-jointed. Tube of siphon reaches between the second and fourth feet. Inner lobe of maxilla oval. Foot-jaws very slender. Inner branch of fourth foot similar to those of preceding feet; last joint of outer branch of first foot with five, second joint of inner branch with two plumose setæ. Terminal joint of fifth foot oblong.

♂ unknown.

16. *Myzopontius pungens*, sp. n.

Distr. Naples.

Genus 11. BRADYPONTIUS, gen. nov.

Thoracic segments produced laterally into processes, which are directed backwards and conspicuous in dorsal view. Rostrum short. Anterior part of genital segment of ♀ broader than posterior. Anterior antennæ of ♀ 8- to 10-, of ♂ (*chelifer*) 11-jointed. Posterior antennæ 4-jointed. Tube of siphon reaches behind the foot-jaws or to the middle of abdomen. Inner branch of fourth foot 3-jointed, almost destitute of setæ; last joint of outer branch of first foot with five, second joint of inner branch with two plumose setæ. Fifth foot knob-like.

17. *Bradypontius magniceps*, Brady.

Artotrogus orbicularis, Brady and Robertson, Rep. Forty-fifth Meet. Brit. Assoc. 1876, p. 197.

Artotrogus magniceps, Brady, Mon. iii. p. 61, t. xciii.; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 37.

Length of ♀ 1.25 millim. Head without crista. Furca scarcely longer than broad. Anterior antennæ 10-jointed;

first and second joints long. Tube of siphon reaches to the posterior margin of the first body-segment. First foot-jaw similar to that of *siphonatus*. Inner branch of fourth foot shorter than first and second joints of outer branch together.

♂ unknown.

Distr. England.

18. *Bradypontius siphonatus*, sp. n.

Length of ♀ 1.6 millim. Head without crista. Furca scarcely as long as broad. Anterior antennæ 10-jointed; first and third joints long, second joint short. Tube of siphon reaches to behind the middle of abdomen. Hook of first foot-jaw elongated, with slender apical claw. Inner branch of fourth foot longer than first and second joints of outer branch together.

♂ unknown.

Distr. Naples.

19. *Bradypontius Normani*, Brady and Robertson.

Dyspontius Normani, Brady and Robertson, Rep. Forty-fifth Meet. Brit. Assoc. 1876, p. 197.

Artotrogus Normani, Brady, Mon. iii. p. 63, tt. xci.-xciii.; I. C. Thompson, Trans. Lit. & Phil. Soc. Liverpool, vol. vii. p. 37, and ? Journ. Linn. Soc., Zool. vol. xx. p. 154; ? Canu, Cop. Boulonnais, p. 266, t. xxvii.

Length of ♀ 1.6 millim. Head without crista. Furca longer than broad. Anterior antennæ 9-jointed; first and second joints long. Tube of siphon reaches rather behind the posterior margin of first body-segment. First foot-jaw as in *siphonatus*. Inner branch of fourth foot nearly as long as the first and second of outer branch together.

♂ unknown*.

Distr. Durham; Isle of Man; Madeira?; Wimereux?

20. *Bradypontius chelififer*, sp. n.

Length of ♀ 1.15, of ♂ 0.85 millim. Head with crista. Furca longer than broad. Anterior antennæ of ♀ 8-, of ♂ 11-jointed; first and second joints long. Tube of siphon reaches to the posterior margin of first body-segment. Hook of first foot-jaw thick, chelifiform; apex tumid, claw stout. Inner branch of fourth foot rather shorter than first and second joints of outer branch together.

Distr. Naples.

* The diagnosis is given according to Canu, although the identity of his *Normani* with Brady's *Normani* is not certain.

Genus 12. PTEROPONTIUS, gen. nov.

Thoracic and anterior abdominal segments produced laterally into large angular processes. First body-segment with dorsal crista, reaching from frontal to posterior margin. Rostrum triangular. Anterior antennæ of ♀ 8-, of ♂ 10-jointed. Posterior antennæ 3-jointed. Tube of siphon reaches to the posterior foot-jaws. Fourth foot destitute of inner branch. Branches of first foot 2-jointed. Fifth foot knob-like.

21. *Pteropontius cristatus*, sp. n.

Distr. Naples.

Genus 13. GALLOPONTIUS, gen. nov.

Thoracic segments produced laterally into processes. Forehead with dorsal cap-like convexity. Rostrum prominent. Anterior part of genital segment of ♀ broader than posterior. Anterior antennæ of ♀ 9-, of ♂ 11-jointed. Posterior antennæ 4-jointed. Tube of siphon thick, rippled inside, and reaching beyond the fourth foot. Inner branch of fourth foot wanting. Fifth foot knob-like.

22. *Gallopontius fringilla*, sp. n.

Distr. Naples.

Genus 14. DYSPONTIUS, Thorell, 1859.

Thoracic segments produced laterally into processes. Rostrum not prominent. Anterior part of genital segment of ♀ broader than posterior. Anterior antennæ of ♀ 9- to 10-, of ♂ 10- to 11-jointed. Posterior antennæ 4-jointed. Tube of siphon reaches between foot-jaws and third foot. Inner branch of fourth foot wanting. Fifth foot knob-like.

23. *Dyspontius striatus*, Thorell.

Dyspontius striatus, Thorell, Sv. Vet.-Akad. Handl. Stockholm, vol. iii. p. 81, t. xiv.; ? Norman, Rep. Brit. Assoc. 1866, p. 198; ? Brady, Mon. iii. p. 66, t. xcii.; ? I. C. Thompson, Proc. Lit. & Phil. Soc. Liverpool, vol. iii. p. 189; ? Canu, Cop. Boulonnais, p. 266, t. xxviii.

♀. Length 1.25 millim. Cephalothorax rather broader than long. Furca rather longer than broad, less than half as long as the last abdominal segment. Anterior antennæ 9-jointed; first and second joint long. Tube of siphon reaches to the third thoracic segment. Inner lobe of maxilla scarcely

longer than outer, with one seta. Outer margin of outer branches of swimming-feet not denticulate*.

Distr. Christineborg; Hebrides?; British seas?; Wime-reux?

24. *Dyspontius Thorellii*, sp. n.

Length of ♀ 1.15–1.2, of ♂ 0.85–0.95 millim. Cephalothorax and furca longer than broad. Anterior antennæ of ♀ 10-, of ♂ 11-jointed; first and third joints long, second joint short; third joint of antennæ of ♂ followed by four short joints and a longer joint, which bears at the anterior margin a movable spine. Tube of siphon reaches between first and third foot. Inner lobe of maxilla nearly twice as long as outer, with short seta at apex. First foot: first joint of outer branch with one, last joint with four, second joint of inner branch with one plumose seta; second joint of inner branch of first to third feet with a double tooth at outer margin; outer margin of outer branch of second to fourth feet denticulate.

Distr. Naples.

25. *Dyspontius tenuis*, sp. n.

♀. Length 1.1 millim. Cephalothorax and furca longer than broad. Anterior antennæ 9-jointed; first and third joints long, second joint short. Siphon as in *Thorellii*. Inner lobe of maxilla about $1\frac{1}{3}$ times as long as outer, with short seta. Swimming-feet as in *Thorellii*.

♂ unknown.

Distr. Naples.

26. *Dyspontius capitalis*, sp. n.

Length of ♀ 1.35–1.45, of ♂ 1.1–1.2 millim. Cephalothorax broader than long, furca scarcely longer than broad. Anterior antennæ similar to those of *Thorellii*. Tube of siphon does not reach to the first foot. Inner lobe of maxilla nearly twice as long as outer, with long plumose seta at apex. Swimming-feet as in *Thorellii*.

Distr. Naples.

* According to Thorell. Brady differs from the author of the species in several respects: length of body (1.8 millim.), of siphon (reaches to the posterior margin of the cephalothorax), proportional length of the furca (as long as last abdominal segment), &c. Neither do the descriptions of the male of *striatus* given by Brady and Canu agree; the clasping-antennæ of Brady's specimen resemble those of *brevifurcatus*, the antennæ of Canu's those of *Thorellii*.

27. *Dyspontius brevifurcatus*, sp. n.

Length of ♀ 0·95, of ♂ 0·75–0·85 millim. Cephalothorax nearly $1\frac{1}{2}$ times as long as broad; furca broader than long. Anterior antennæ of ♀ 9-, of ♂ 10-jointed; first and second joints long; second joint of antennæ of ♂ followed by five short joints and a longer joint, which bears at the anterior margin an immovable tooth. Tube of siphon as in *Thorellii*. Inner lobe of maxilla about $1\frac{1}{3}$ times as long as outer, with long seta at apex. First foot: first joint of outer branch without seta, last joint with five, second joint of inner branch with two plumose setæ; tooth at outer margin of second joint of inner branch of first to third foot simple; outer margin of outer branch of second to fourth foot not or scarcely denticulated.

Distr. Naples*.

Subfamily 3. *PONTÆCIELLINEÆ*, nov.

♀. Anterior antennæ 8-jointed; æsthetask on the antepenultimate joint. Mandible without palp. Maxilla consisting of a single lobe. Last joint of outer branch of third and fourth feet with three setæ on inner margin. Fifth foot consisting of one seta on each side. Abdomen 4-jointed. Tube of siphon short. Last joint of anterior antennæ long. Basale of second foot-jaw 1-jointed. Outer margin of last joint of outer branch of swimming-feet with less than three spines. Inner branch of fourth foot normal.

Genus 15. *PONTÆCIELLA*, gen. nov.

♀. Thoracic segments laterally rounded off. Rostrum flat. Anterior part of genital segment scarcely broader than posterior. Ventral seta of furca peculiarly shaped. Exopodite of posterior antennæ knob-like. Hook of first foot-jaw angled. Apical saws of outer branches of swimming-feet long.

♂ unknown †.

28. *Pontæciella abyssicola*, Th. Scott.

Artotrogus abyssicolus, Th. Scott, Trans. Linn. Soc., 2nd ser. Zool. vol. vi. p. 128, tt. xii., xiv.

Distr. 2° N.–4° S., 6°–10° E. (?235–360 fathoms); Naples; 99° W., 3° S. (?1800 m.); 124° W., 9° N. (1000 m.) (*Expedition of the 'Vettor Pisani'*).

* Whether *Dyspontius striatus*, *marginatus*, and *conspicuus*, Hesse (Ann. Sc. Nat. 5 sér. vol. vi. p. 69, t. iv.), really belong to this or to some other genus, is not possible to decide.

† The specimens regarded by Scott as males can scarcely be such; neither are they mature males, as the anterior antennæ are not clasping-organs, nor immature, as the abdomen is said to be 6-jointed.